

ABSTRACT OF THE DISCLOSURE

When a substrate electrode (6) formed on a semiconductor substrate (5) and a device electrode (14) formed on an optical device (13) are joined to each other by solder to mount the device (13) on the substrate (5), a solder piece attached to the substrate electrode (6) is melted in inactive liquid (9) to form a solder bump (12). The substrate electrode (6) on which the solder bump (12) is formed and the device electrode (14) are matched with each other, and the device (13) is disposed so as to confront the substrate (5) in the inactive liquid (9). Thereafter, when the solder bump (12) is melted in the inactive liquid (9) and ultrasonic vibration (11) is applied to join the device electrode (6) and the substrate electrode (14) to each other, the positioning of the device electrode (14) to the substrate electrode (6) is performed by the surface tension of the melted solder bump (12), and then the solder bump (12) is solidified.

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